

Figure 1a Prior Art Cone Design

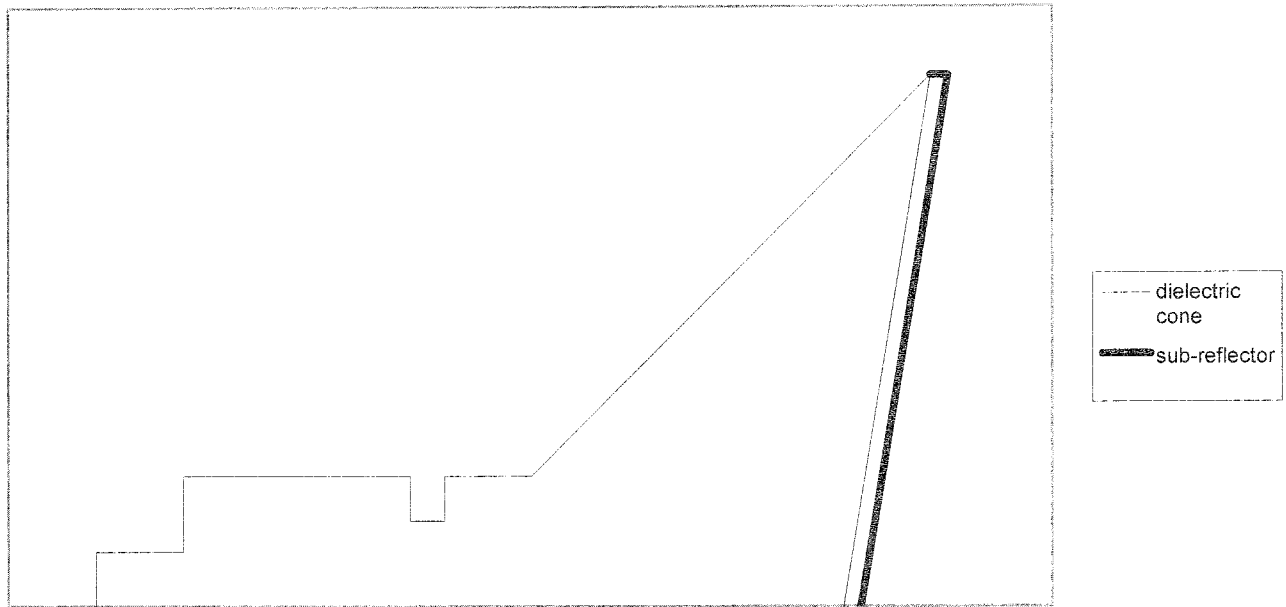
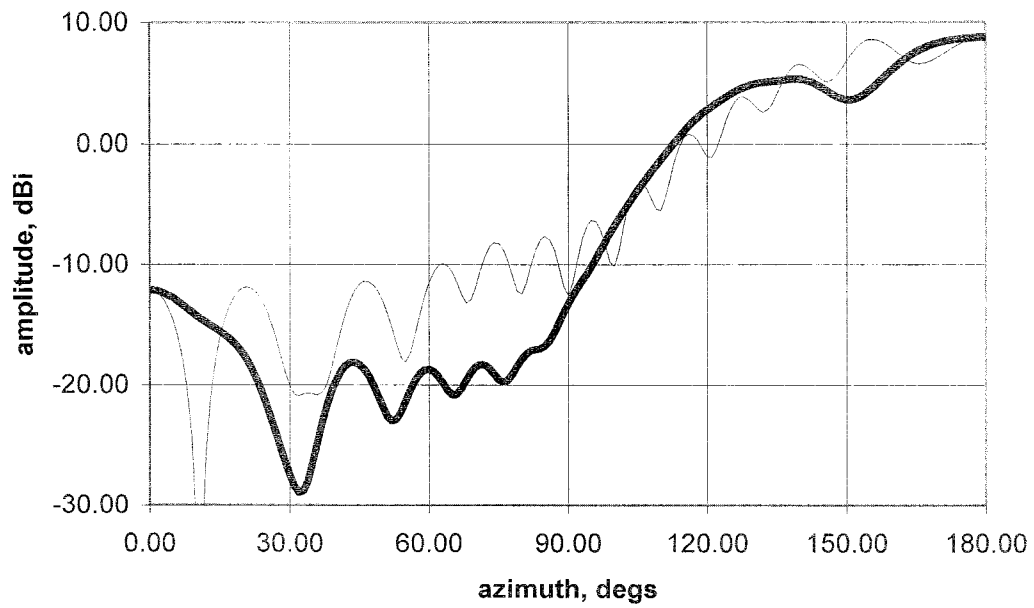


Figure 1b: Etheta and EPhi Amplitude Radiation Patterns from Prior Art Cone Feed (F/D=0.37 typ)



**Figure 1c: Etheta and Ephi Phase Patterns from Prior Art Cone Feed
(F/D=0.37 typ)**

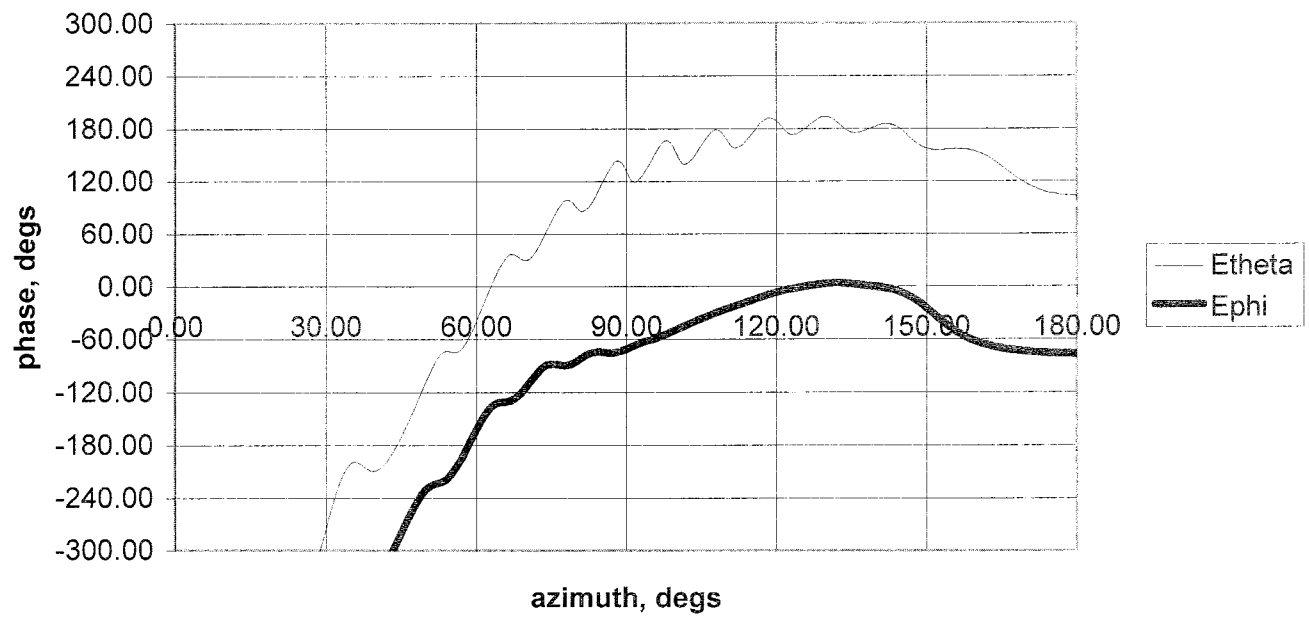


Figure 2a: Prior Art Cone Design (F/D<0.2) typ.

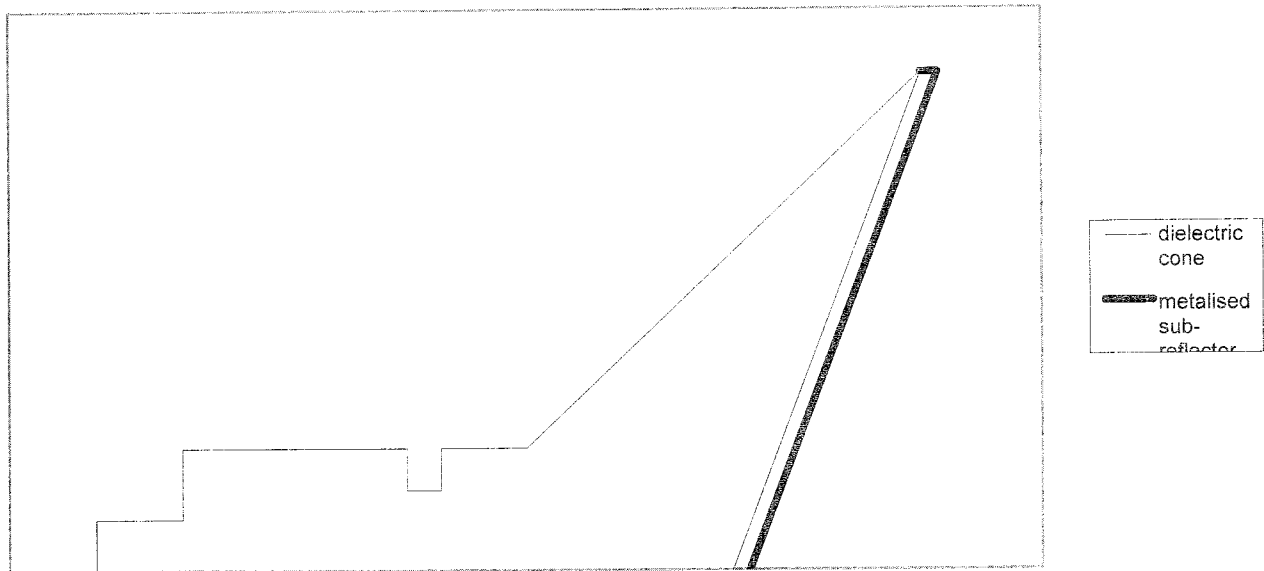


Figure 2b: Etheta and EPhi Amplitude Radiation Patterns from Prior Art Cone Feed (F/D< 0.2 typ)

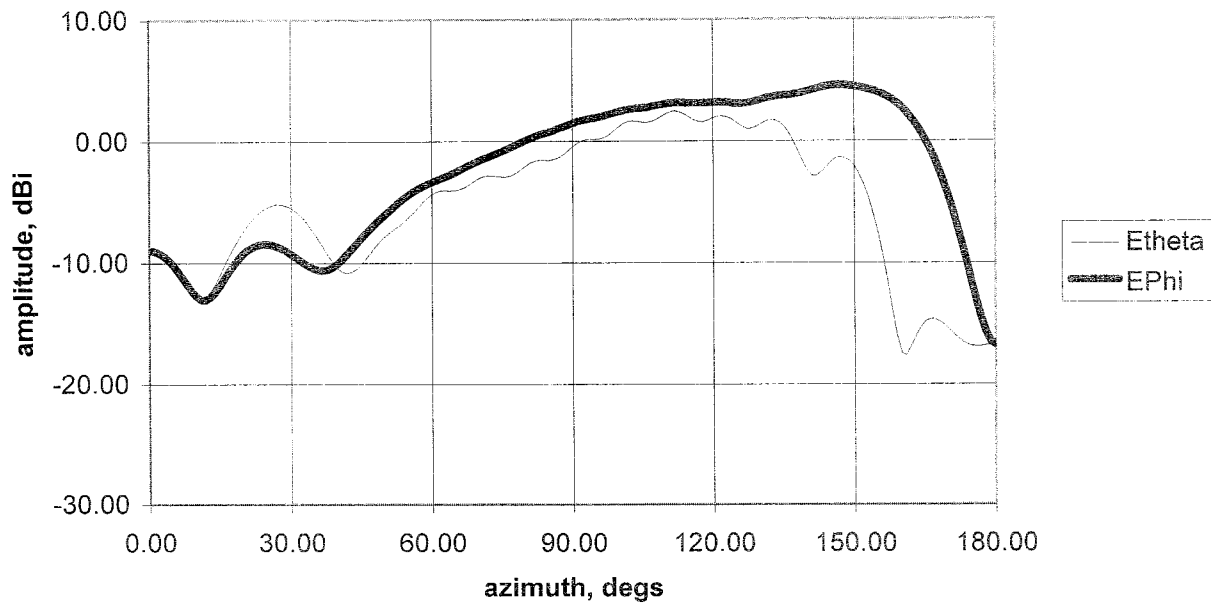


Figure 2c: Etheta and Ephi Phase Patterns from Prior Art Cone Feed (F/D<0.2 typ)

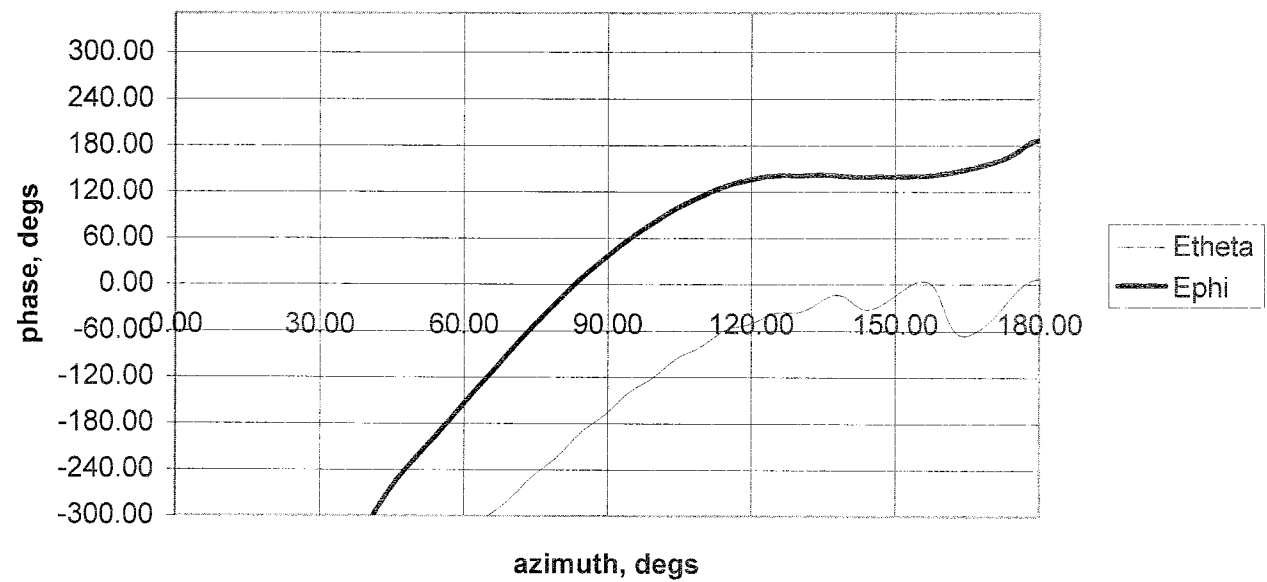


Figure 3a: Prior Art Corrugated Cone Design (F/D<0.2) typ.

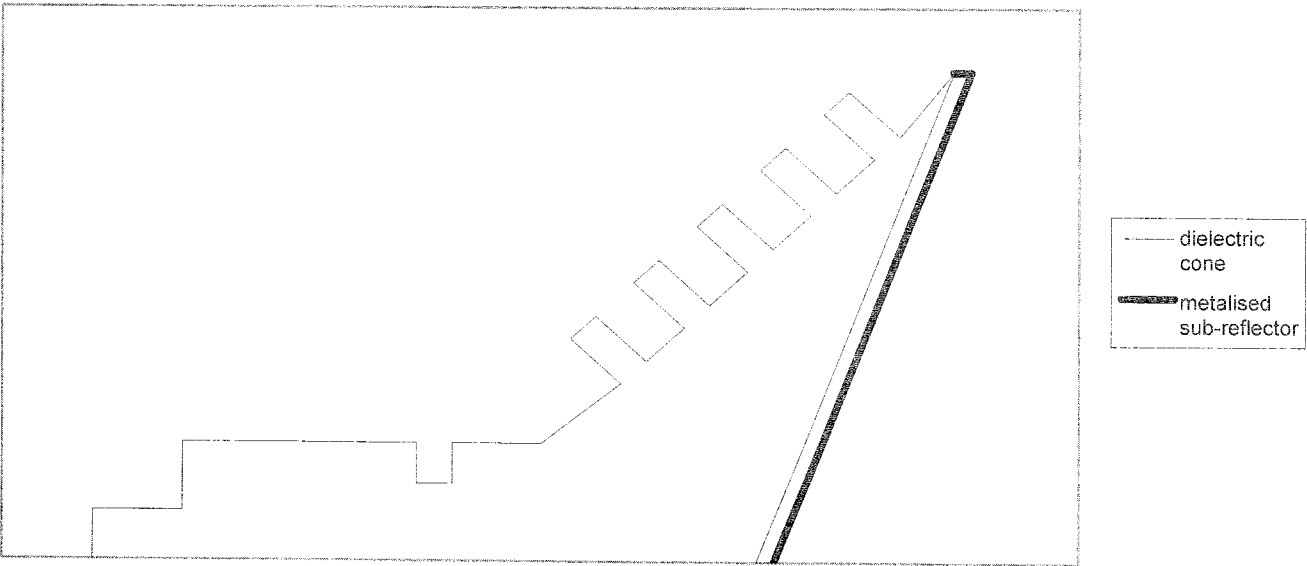


Figure 3b: Etheta and EPhi Amplitude Radiation Patterns from Prior Art Corrugated Cone Feed (F/D< 0.2 typ)

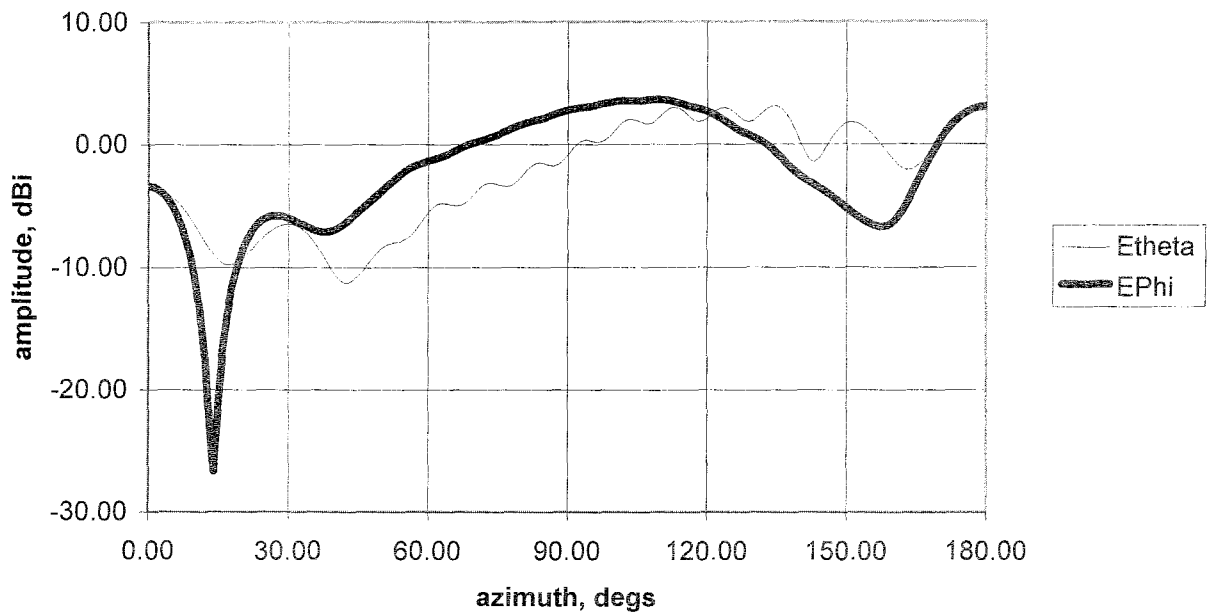
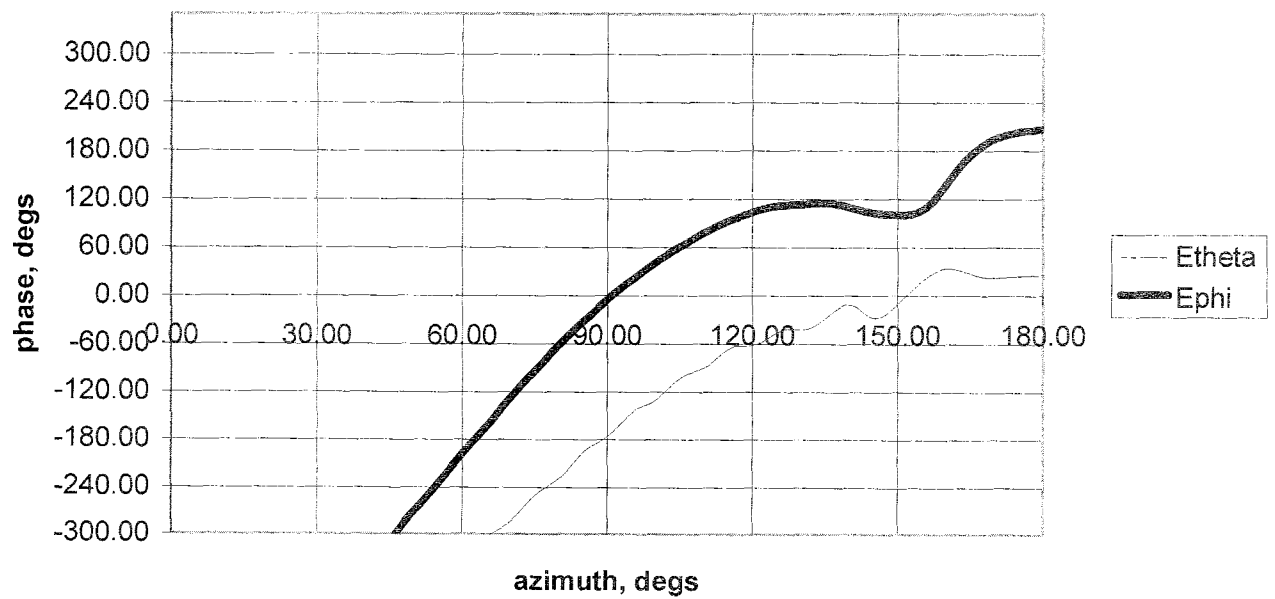


Figure 3c: Etheta and EPhi Phase Patterns from Prior Art Corrugated Cone Feed (F/D<0.2 typ)



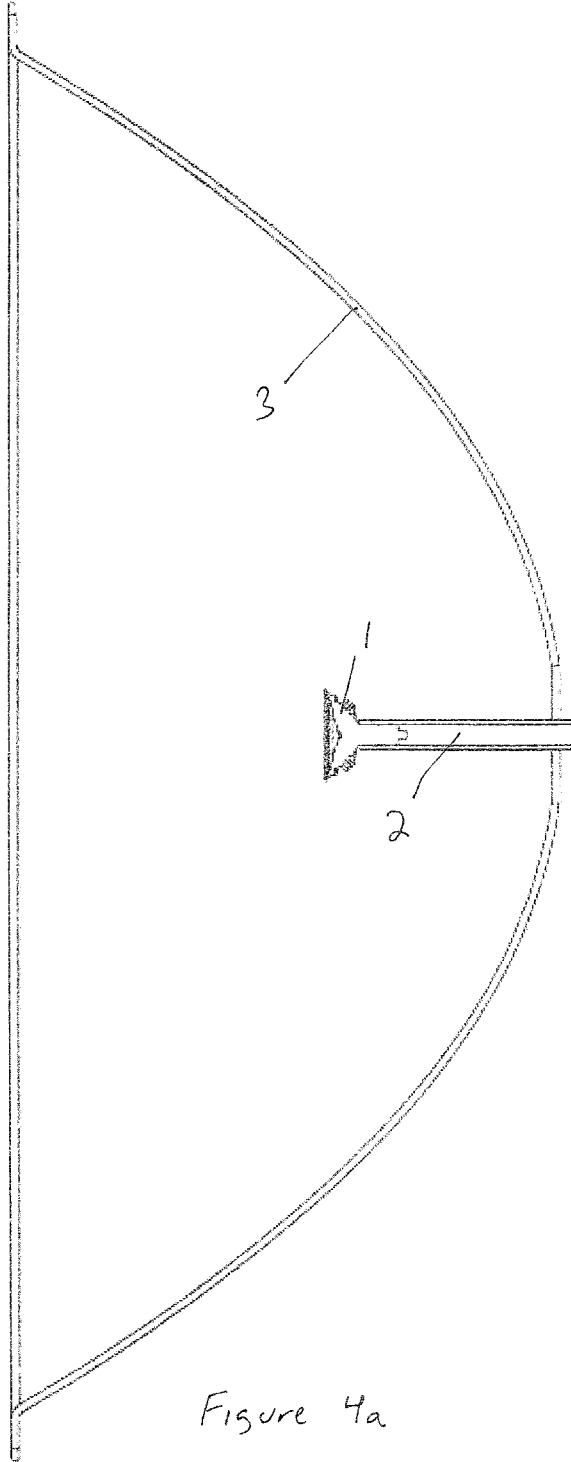


Figure 4a

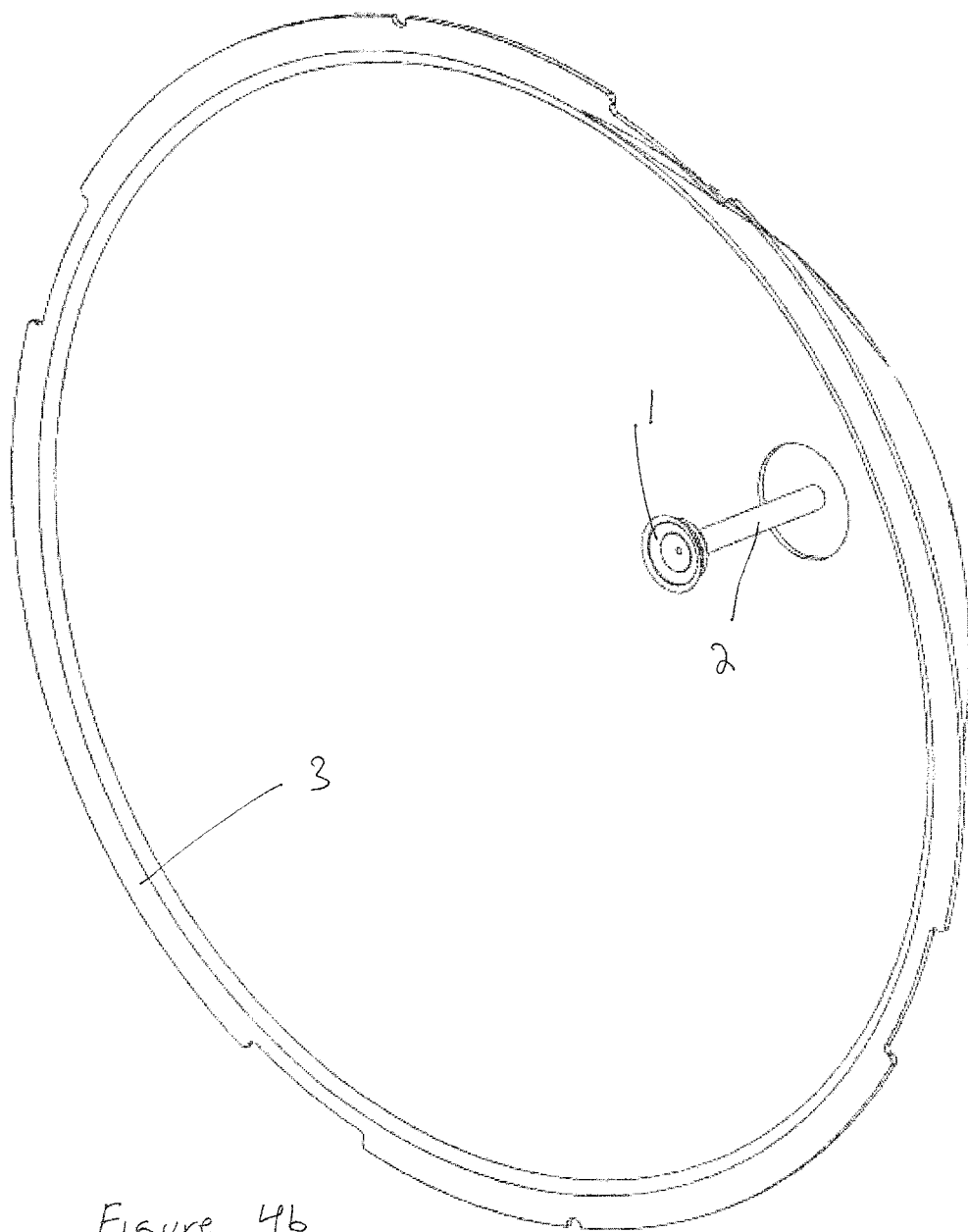


Figure 4b

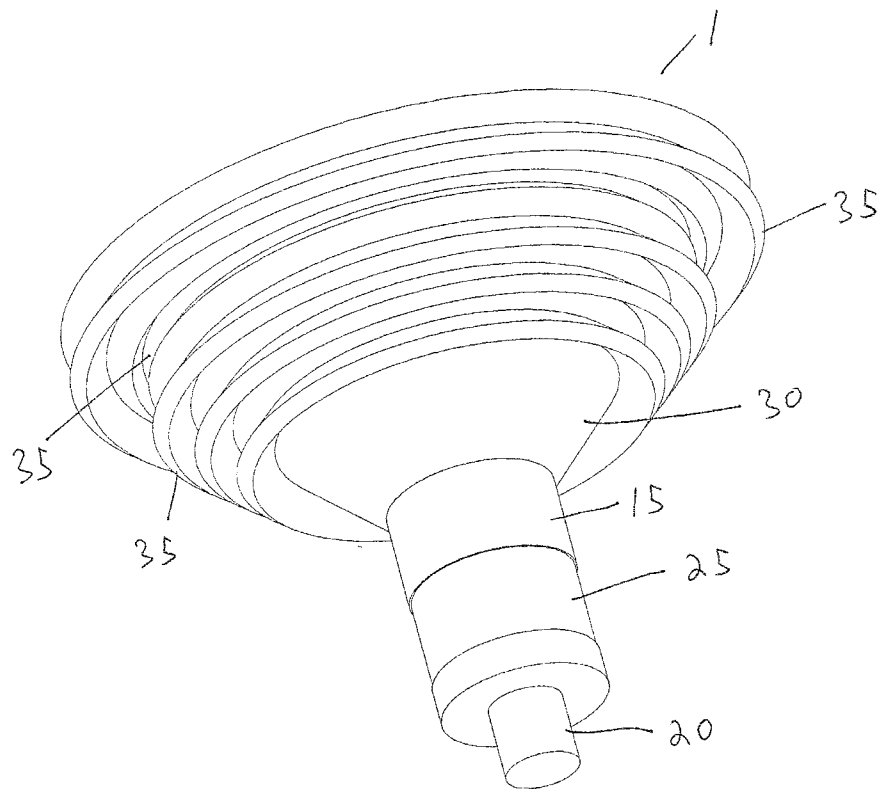


Figure 5a

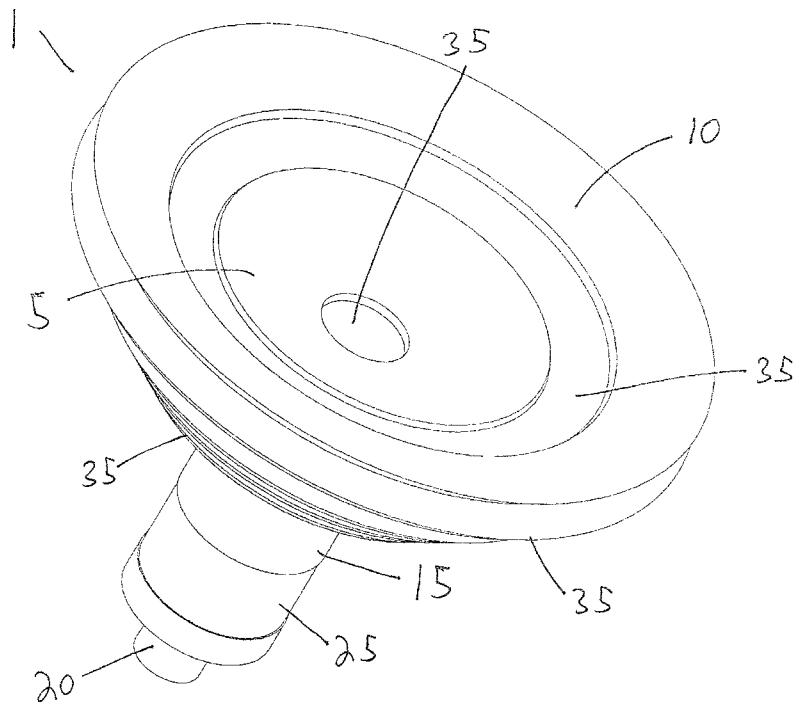


Figure 5b



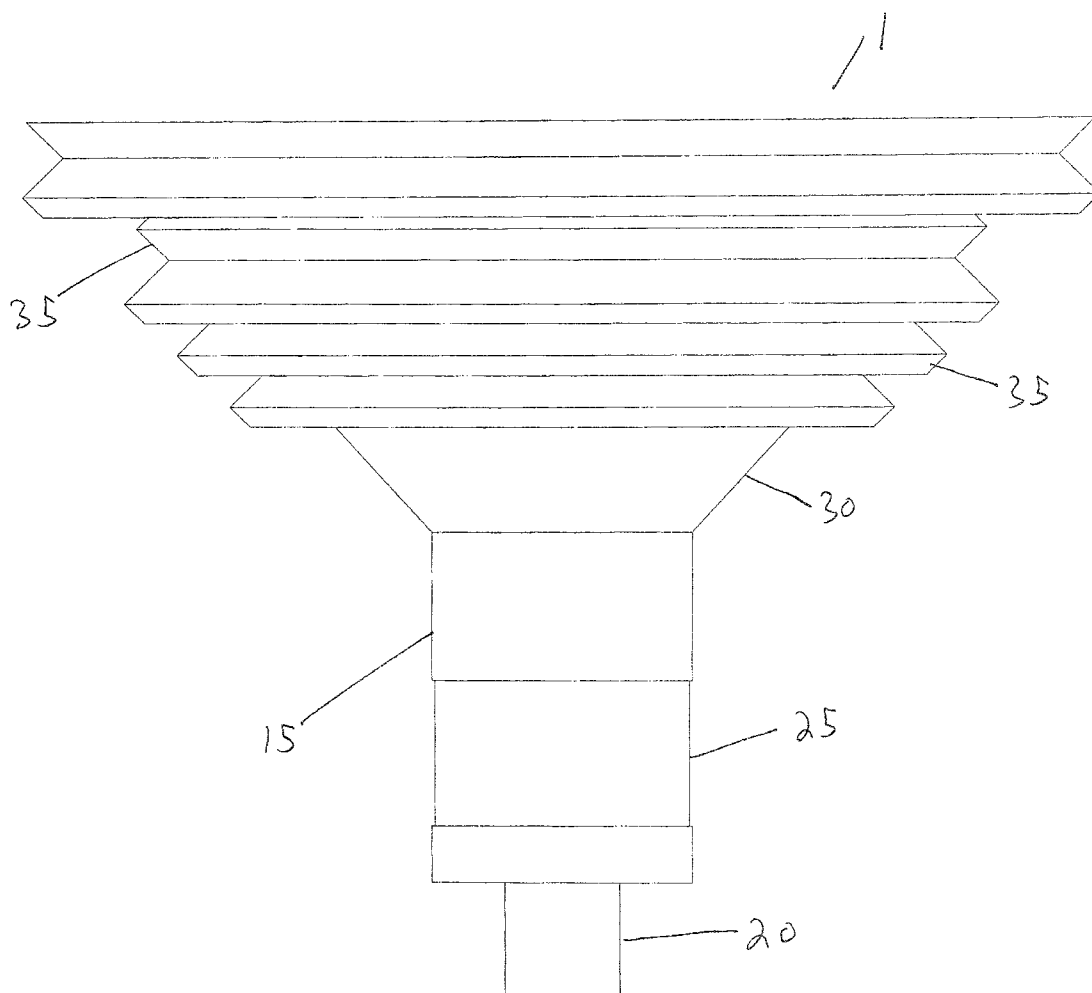


Figure 5c



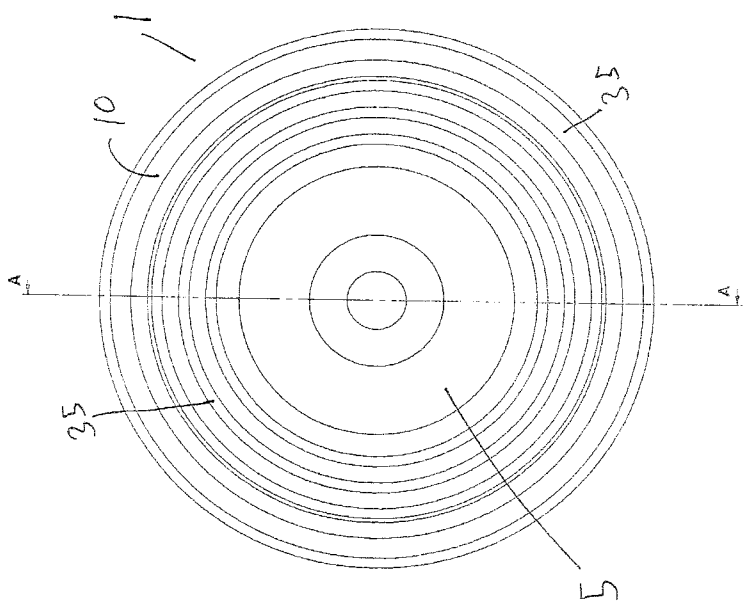


Figure 5d

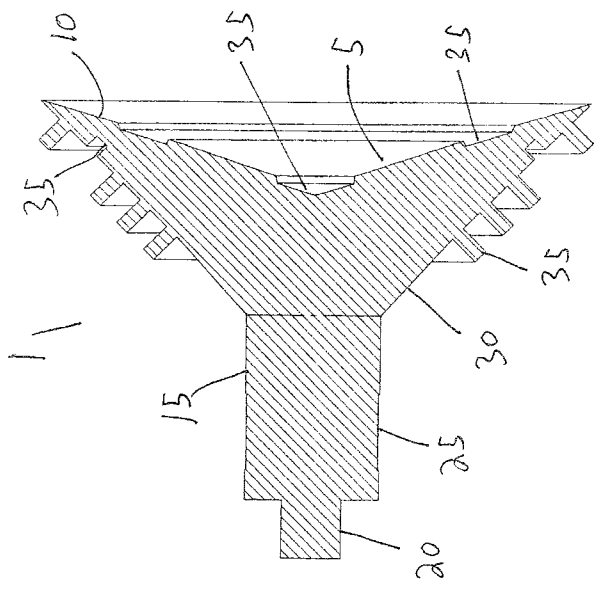


Figure 5e

Figure 6a: 22GHz 1' Measured Radiation Pattern of First Embodiment: E-plane vs ETSI and FCC specs

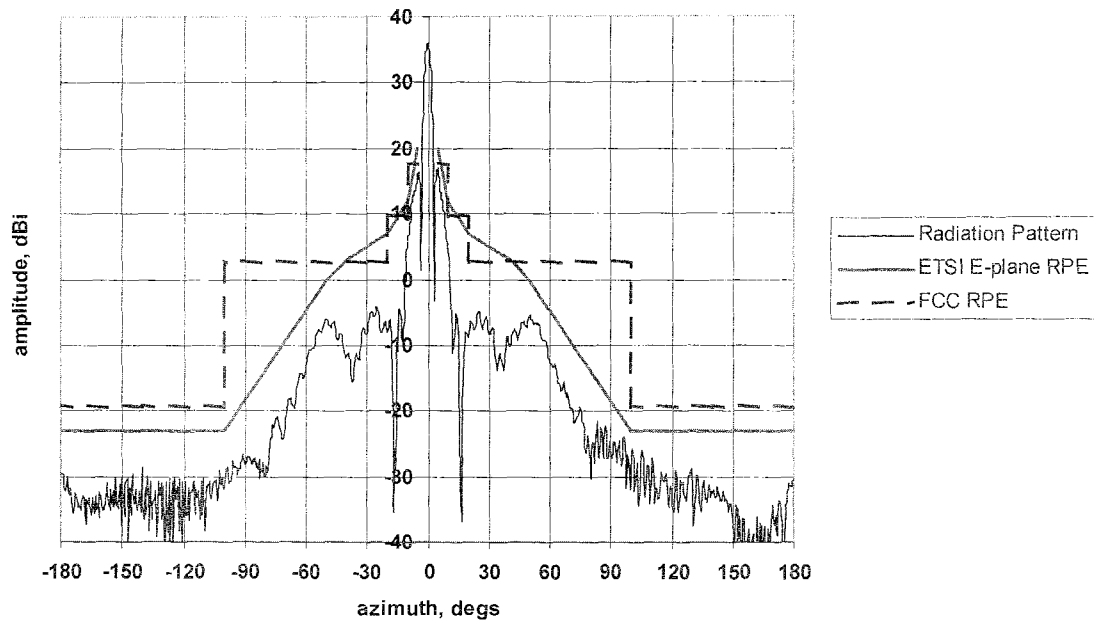
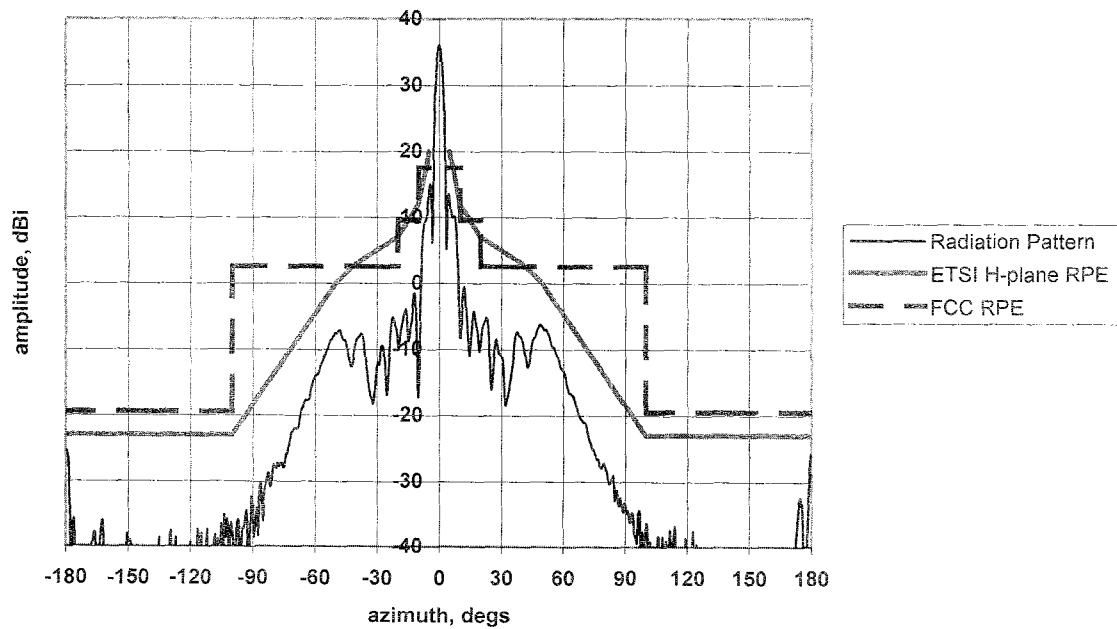
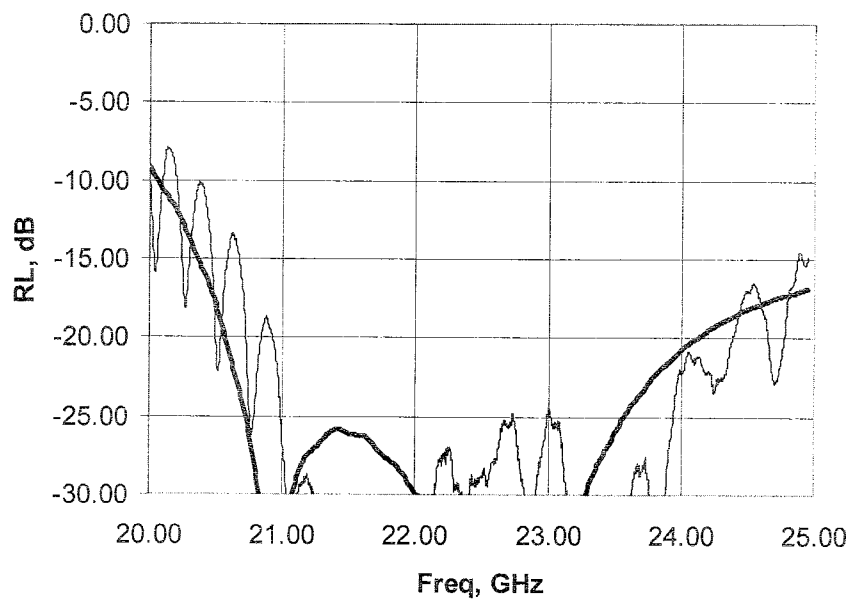


Figure 6b: 22GHz 1' Measured Radiation Pattern of First Embodiment: H-plane vs ETSI and FCC specs



**Figure 7 of First Embodiment: Measured vs Modelled
Return Loss of Cone Feed**



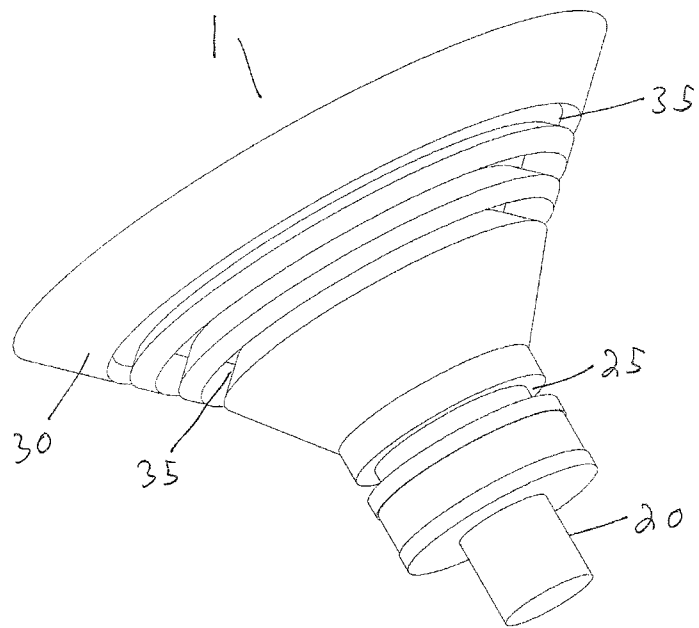


Figure 8a



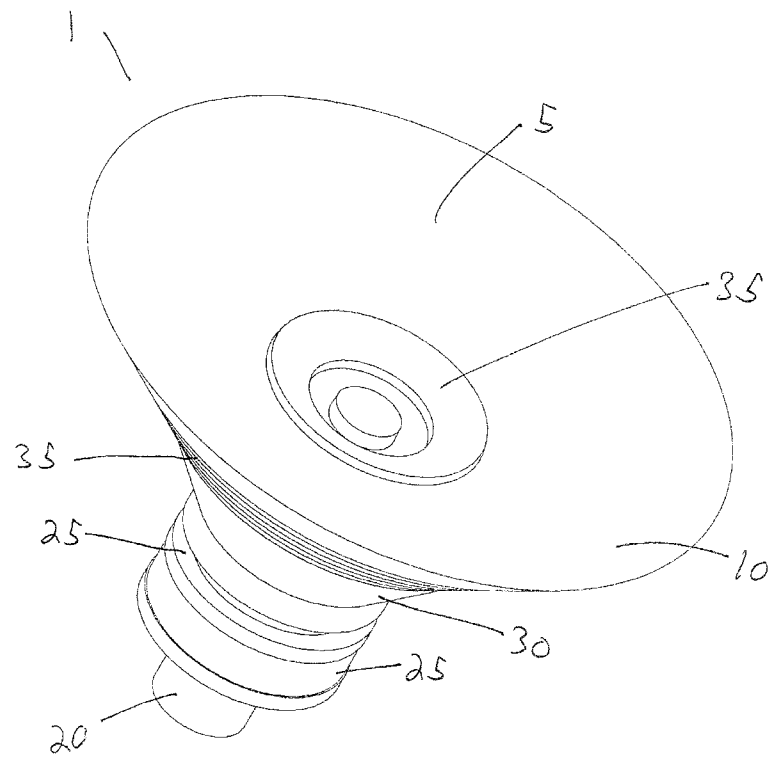


Figure 8b



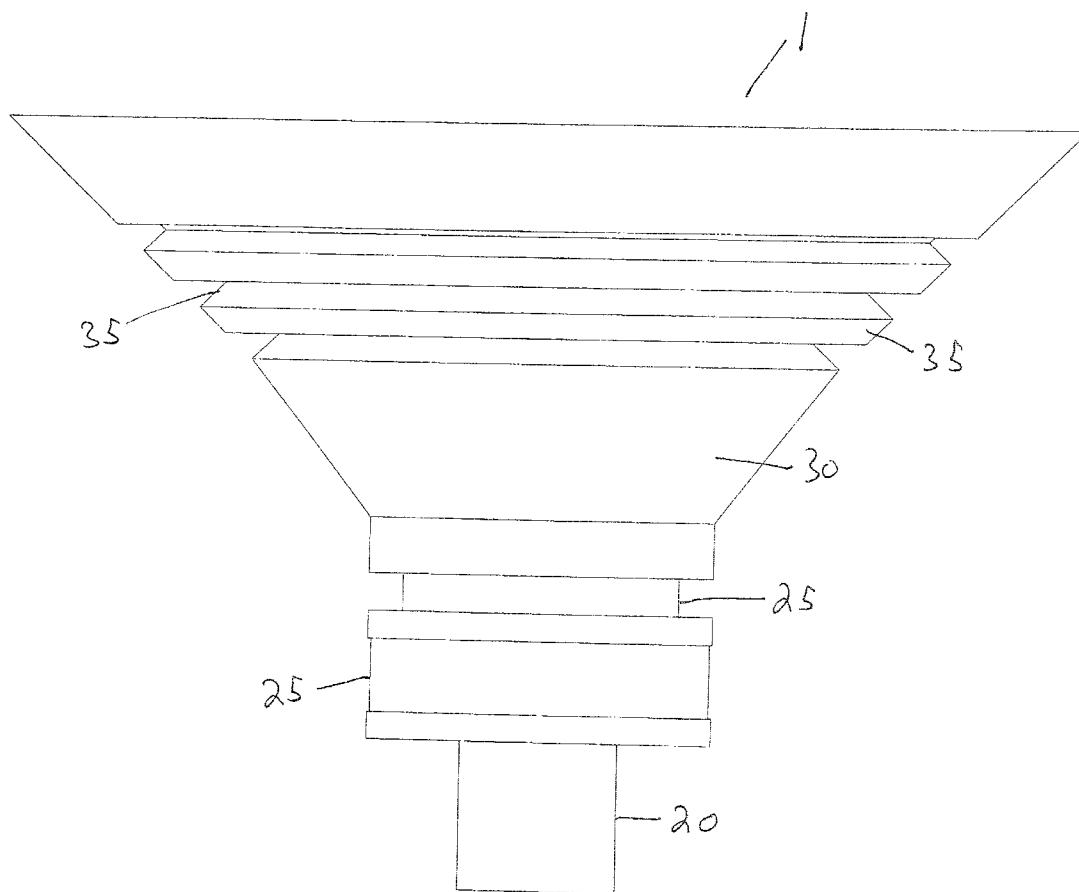


Figure 8c



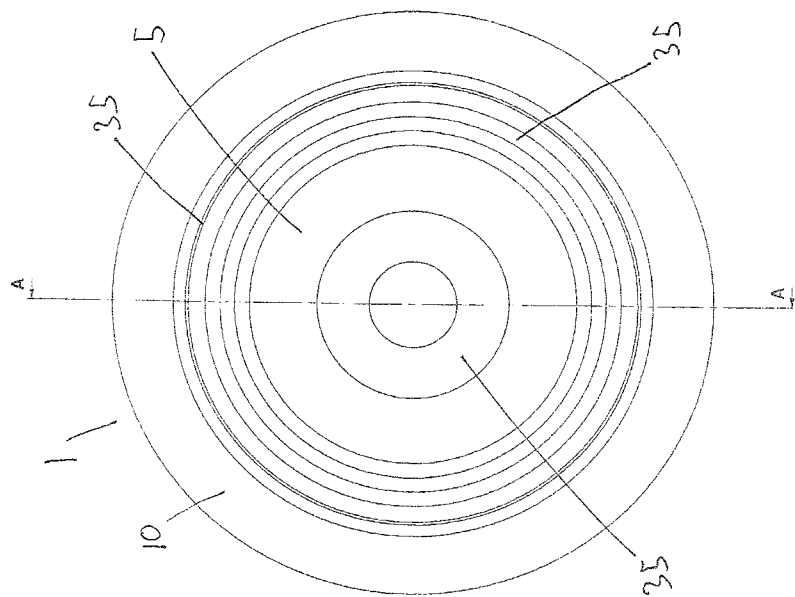


Figure 8d

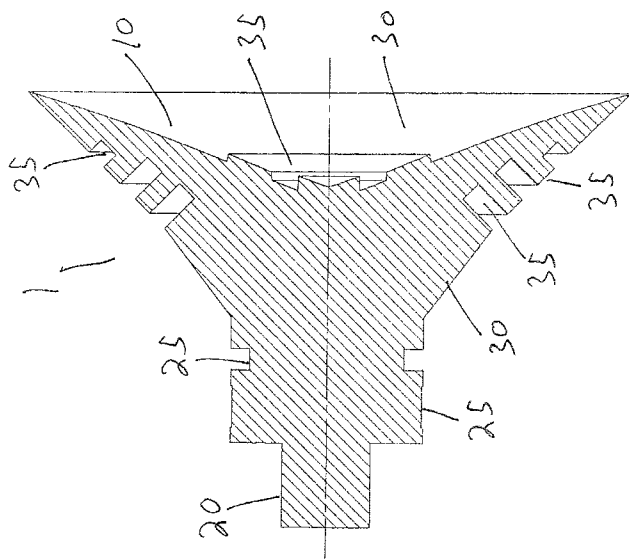


Figure 8e

Figure 9a: 22GHz 1' Measured Radiation Pattern of Second Embodiment: E-plane vs ETSI and FCC specs

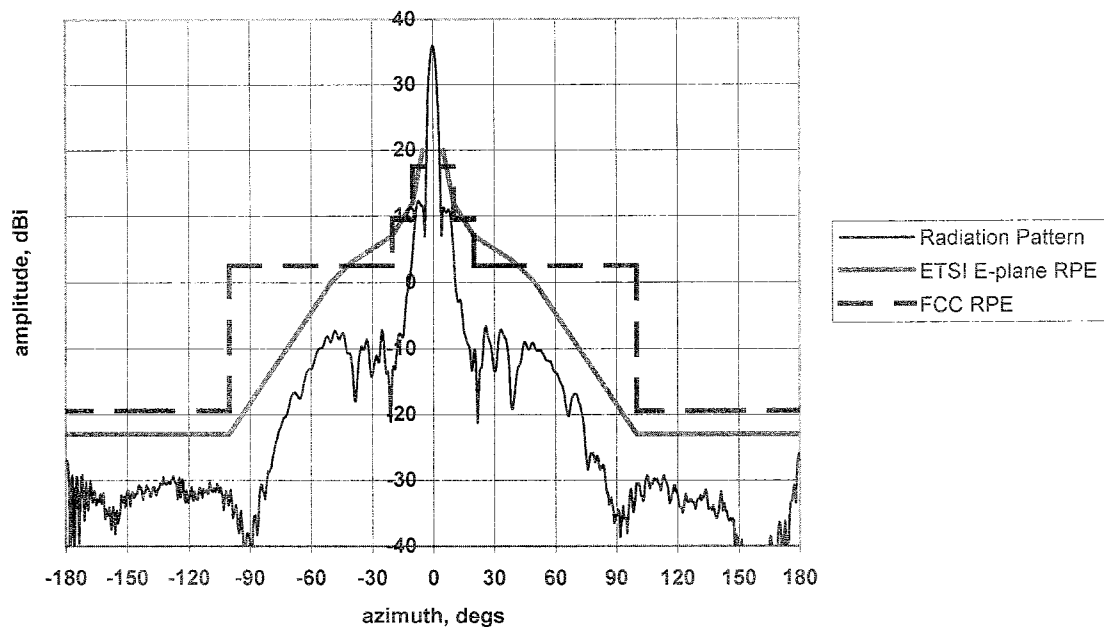


Figure 9b: 22GHz 1' Measured Radiation Pattern of Second Embodiment: H-plane vs ETSI and FCC specs

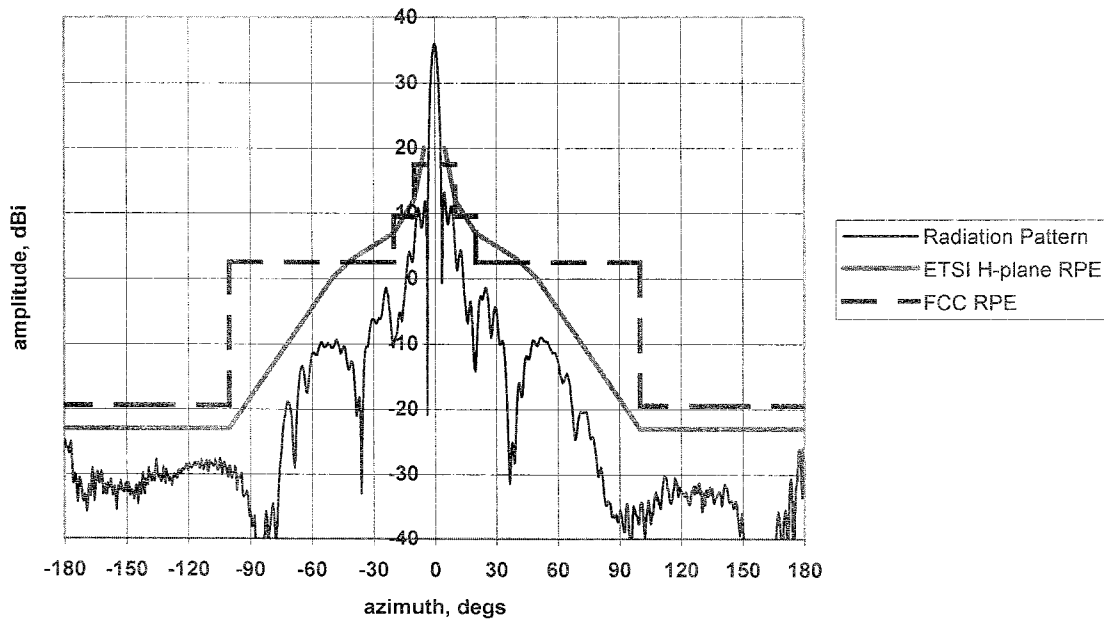


Figure 10a: 3rd Embodiment ($F/D < 0.2$) typ.

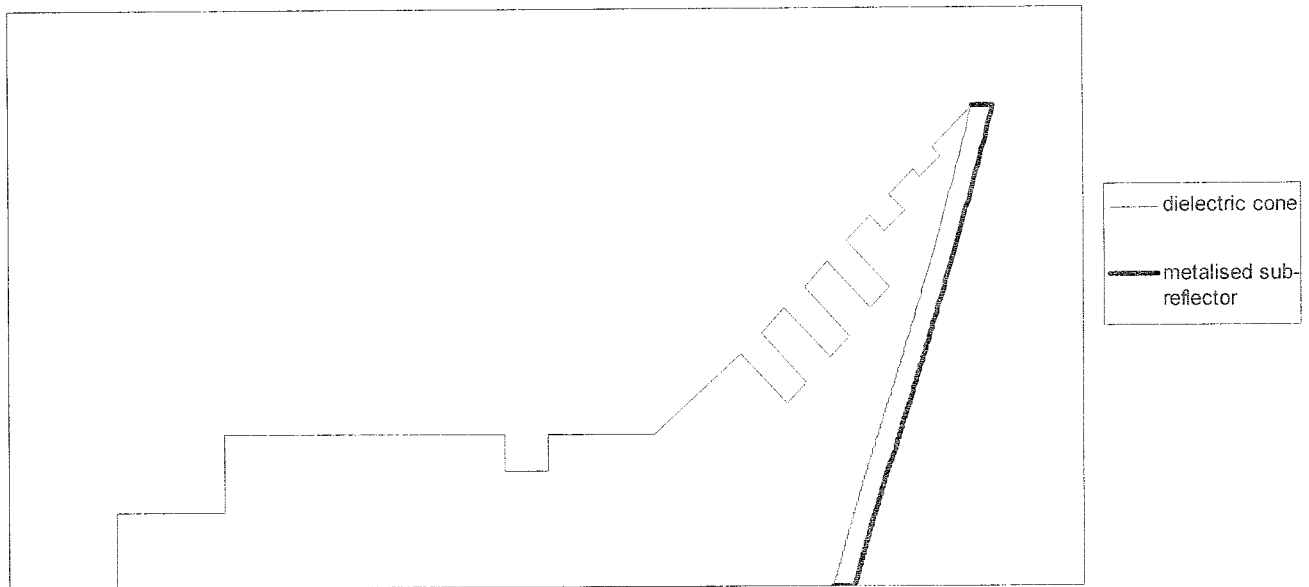


Figure 10b: Etheta and EPhi Amplitude Radiation Patterns

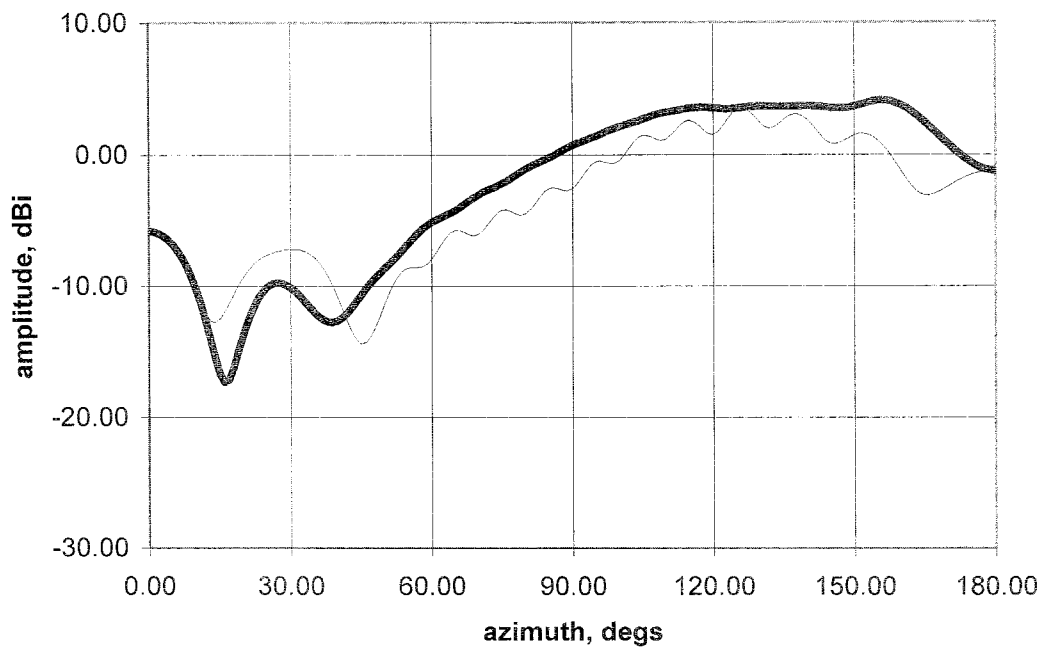


Figure 10c: Etheta and Ephi Phase Patterns (F/D<0.2 typ)

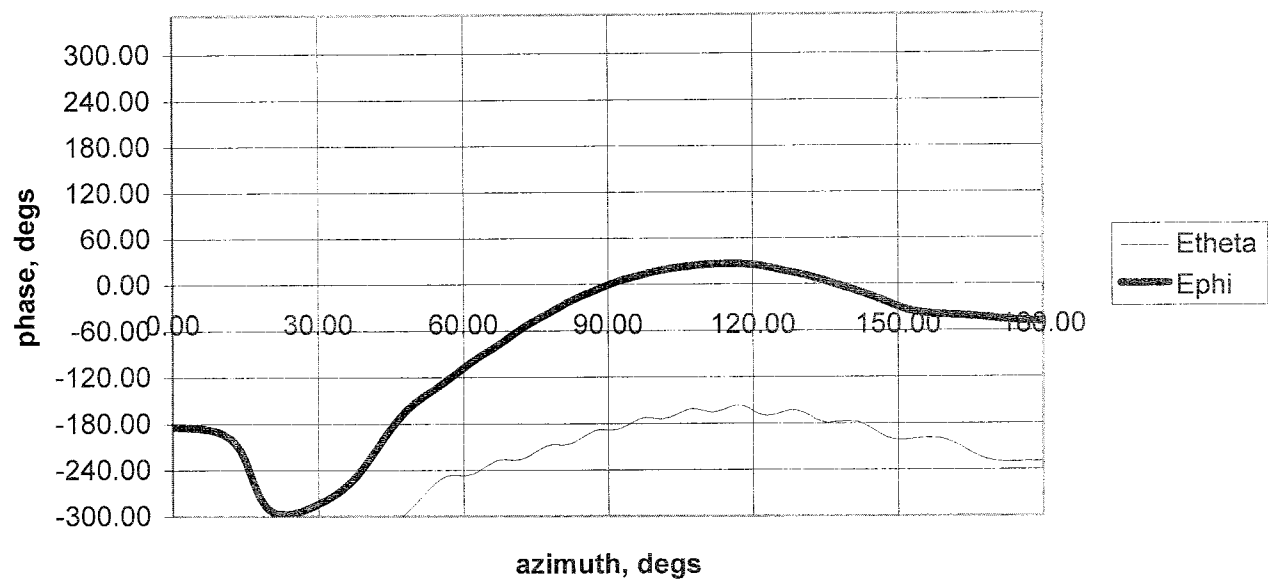


Figure 11a: 4th Embodiment (F/D<0.2) typ.

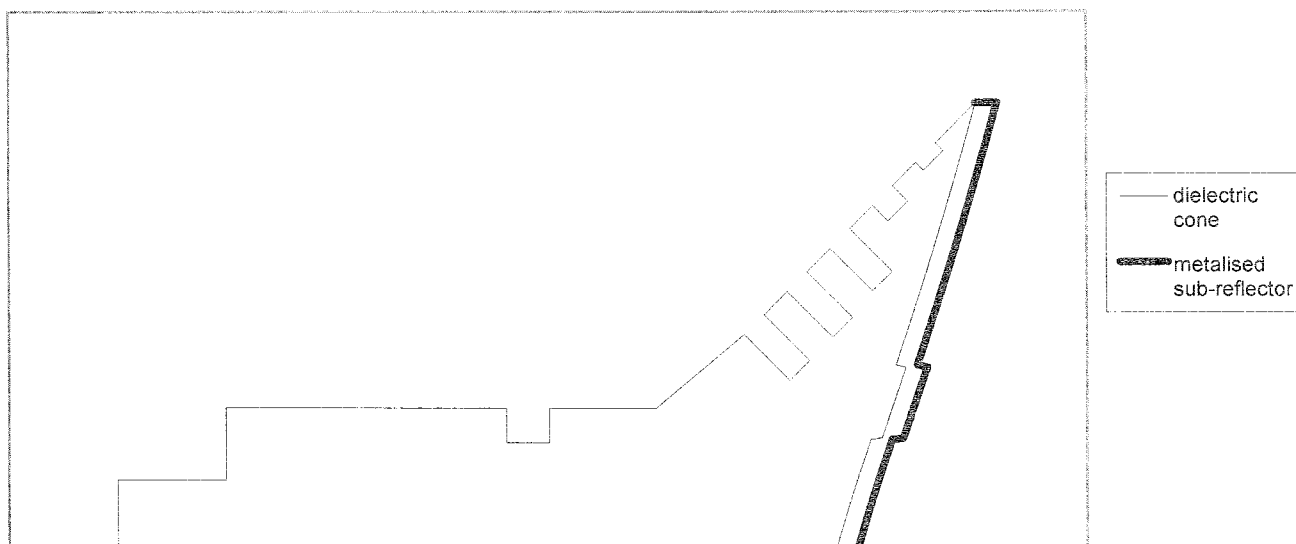


Figure 11b: Etheta and EPhi Amplitude Radiation Patterns

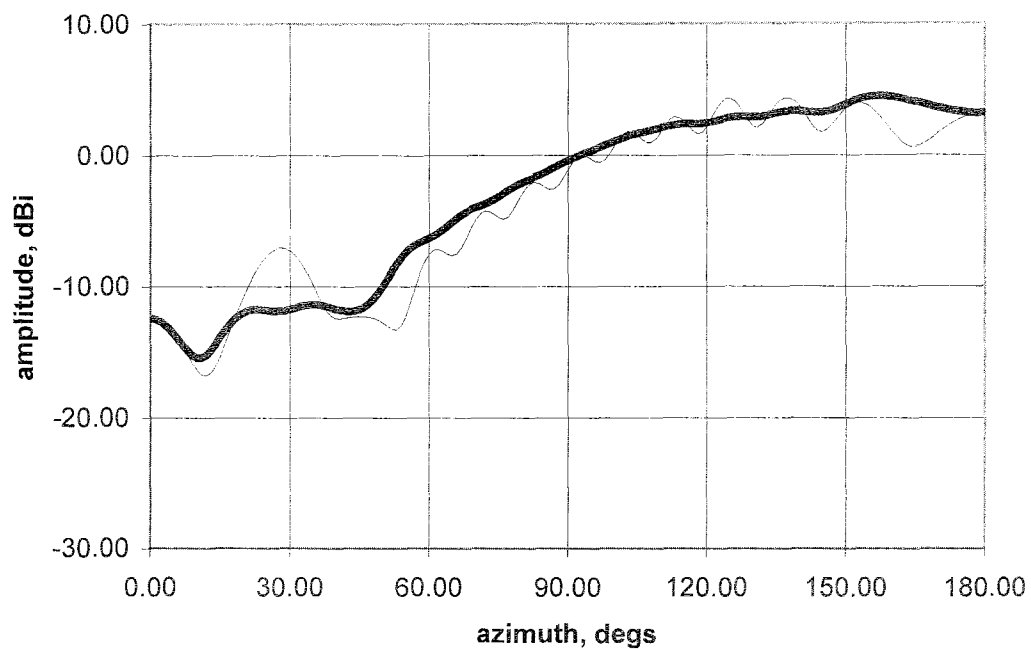


Figure 11c: Etheta and Ephi Phase Patterns

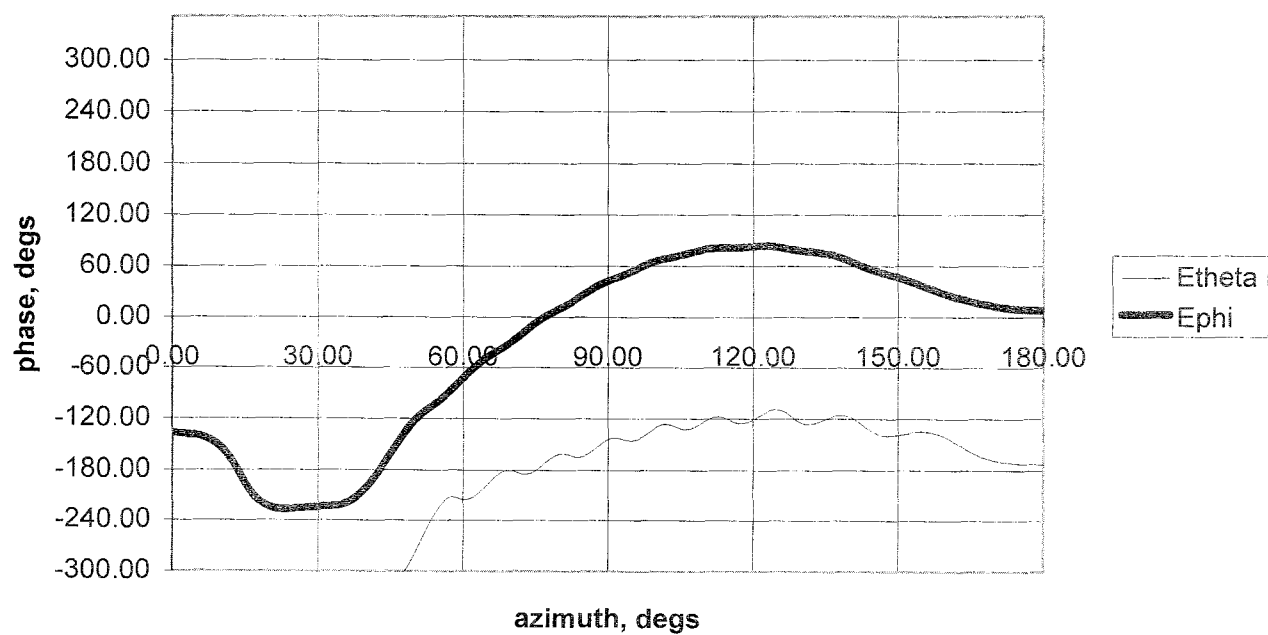


Figure 12a: 5th Embodiment ($F/D < 0.2$) typ.

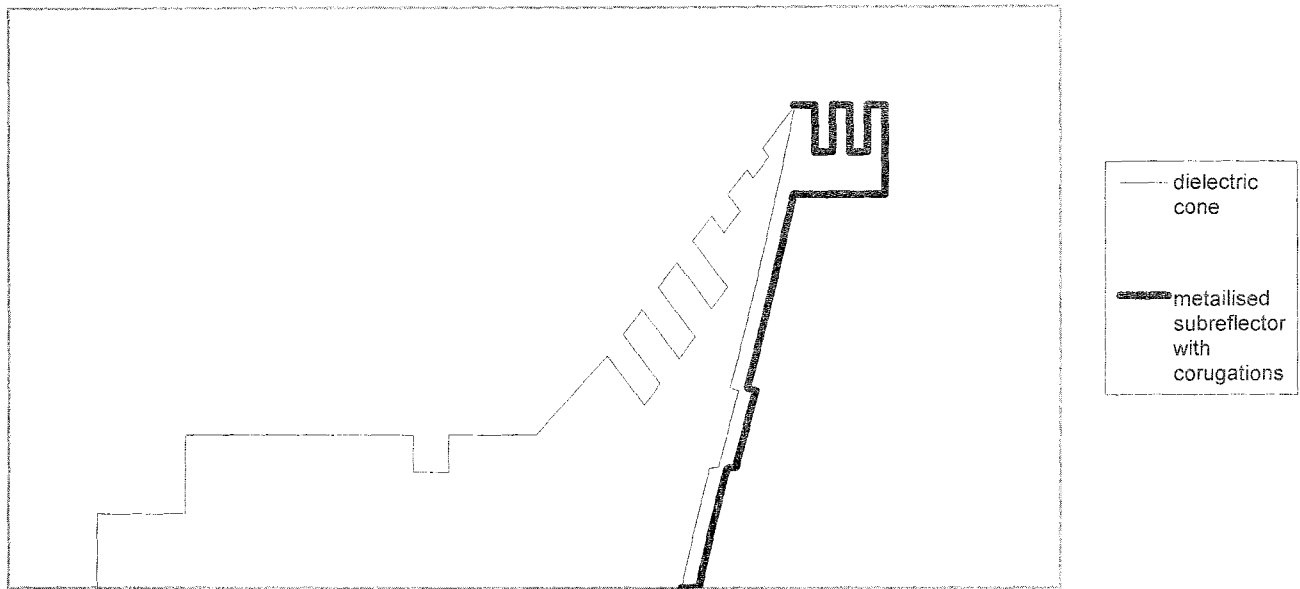


Figure 12b: Etheta and EPhi Amplitude Radiation Patterns

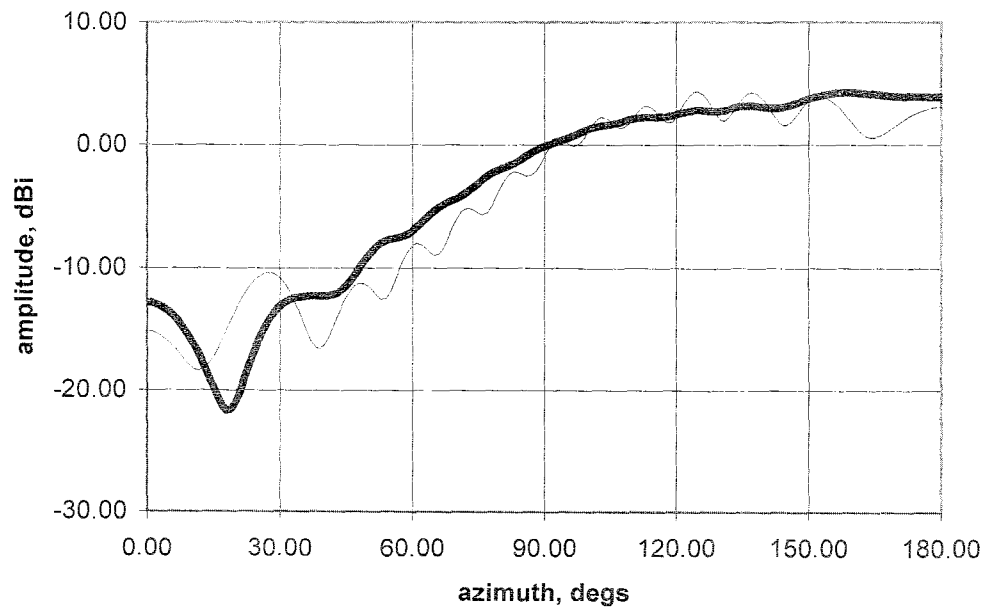


Figure 12c: Etheta and Ephi Phase Patterns

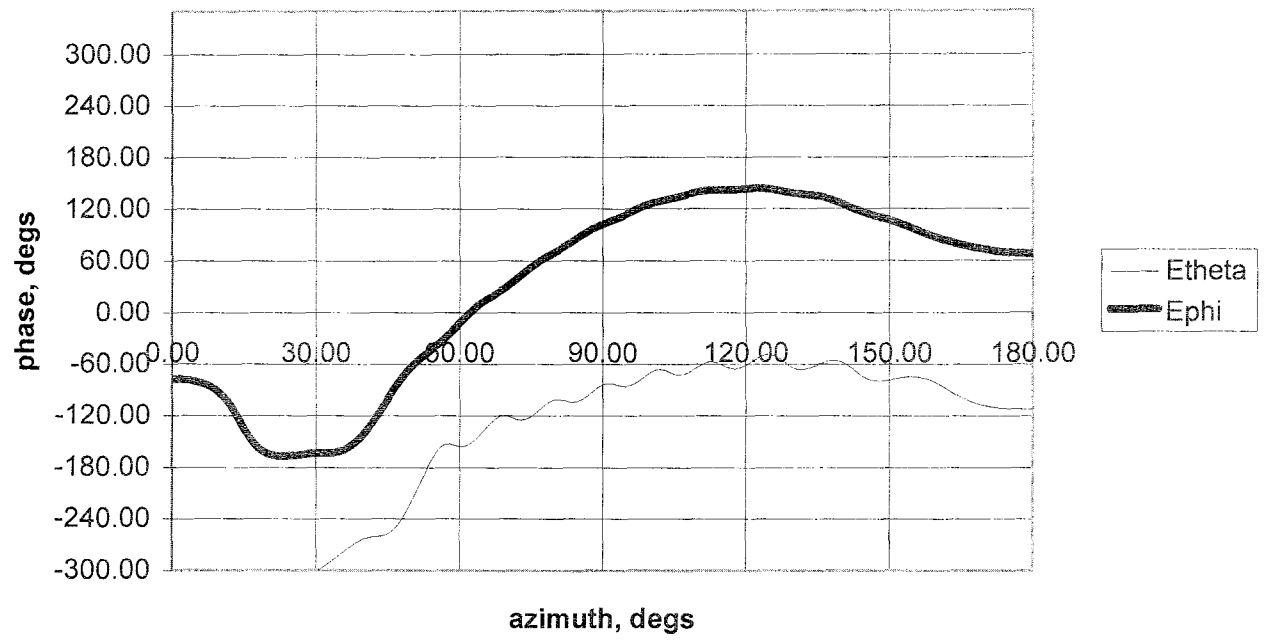


Figure 13a: 6th Embodiment ($F/D < 0.2$) typ.

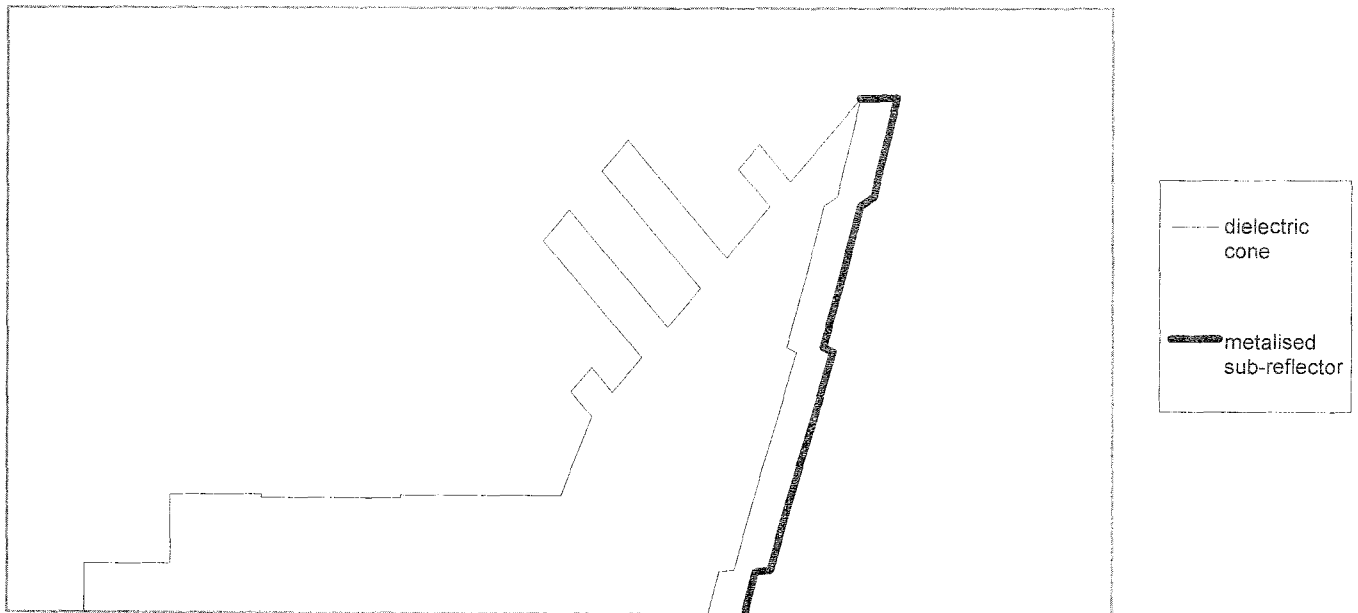


Figure 13b: Etheta and EPhi Amplitude Radiation Patterns

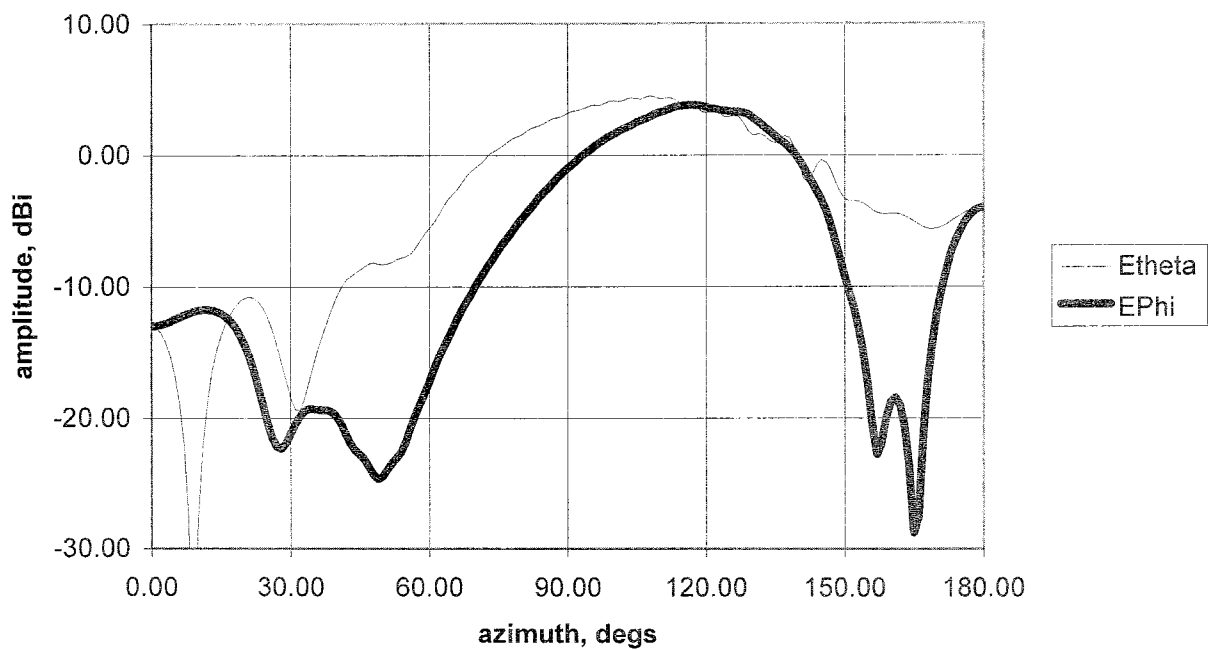


Figure 13c: Etheta and EPhi Phase Patterns

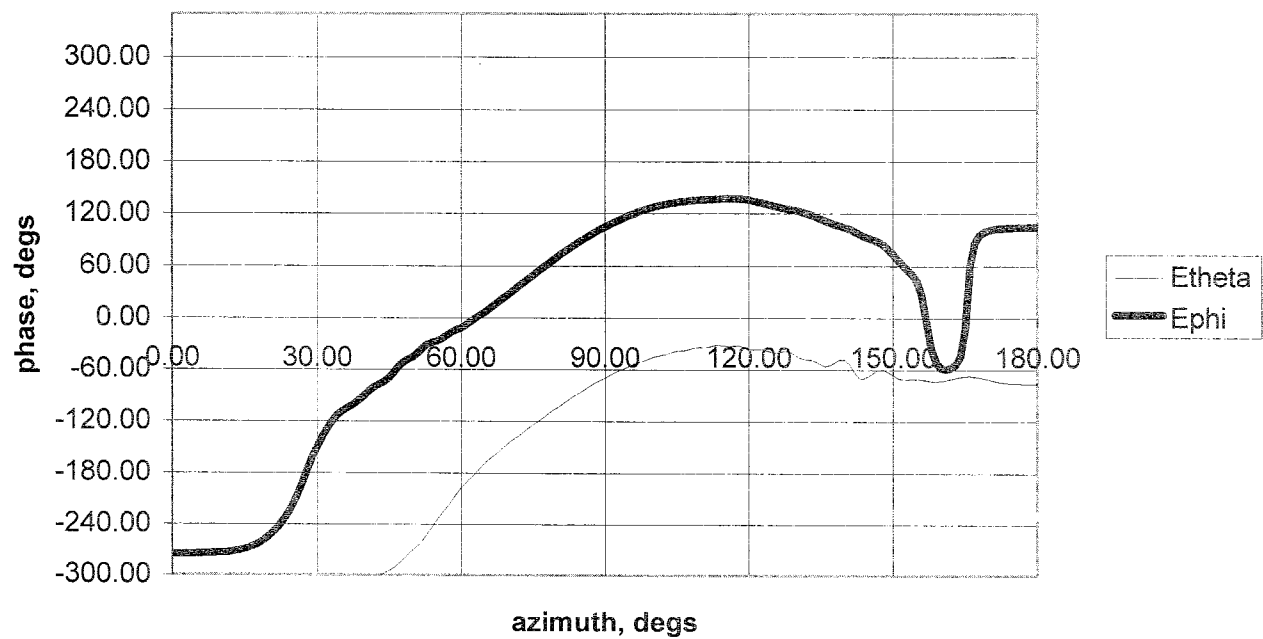


Figure 13d: 38GHz 1' Measured Radiation Patterns of Sixth Embodiment: E-plane vs ETSI and FCC specs

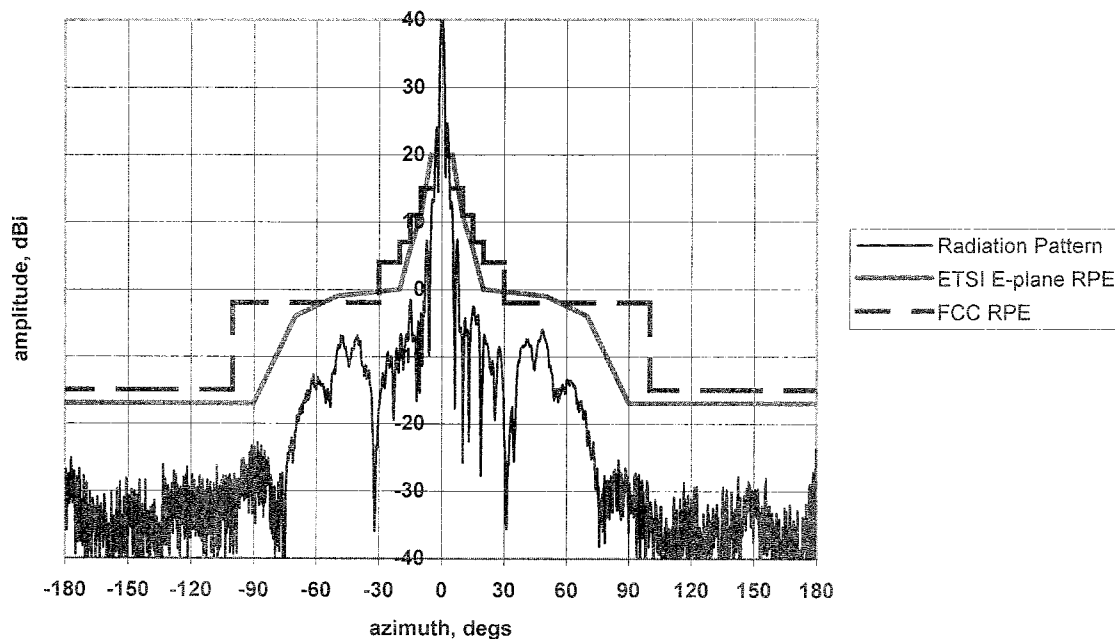


Figure 13e: 38GHz 1' Measured Radiation Patterns of Sixth Embodiment: H-plane vs ETSI and FCC specs

